

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for preparation of a crosslinked asphalt composition, comprising:

- heating an asphalt composition at a first temperature of from 250 (121 °C) to 430 °F (221 °C), in the presence of a) a crosslinkable polymer and b) a crosslink co-agent;
- adding a crosslinking initiator at a second temperature of ~~greater than 360 °F from 356°F to 430°F~~; and

agitating the resulting mixture at a temperature ~~at of~~ from 360 to 410 °F for a period of time sufficient to complete crosslinking.

Claim 2 (Original): The process as claimed in claim 1, wherein said crosslinkable polymer is a member selected from the group consisting of (co)polymers containing styrene units and/or butadiene units.

Claim 3 (Original): The process as claimed in claim 2, wherein said crosslinkable polymer is a member selected from the group consisting of polymers containing polystyrene blocks and/or polybutadiene blocks.

Claim 4 (Currently Amended): The process as claimed in claim 3, wherein said crosslinkable polymer is a member selected from the group consisting of Styrene Butadiene Rubber (SBR), Styrene Butadiene Styrene (SBS) and Polybutadiene (BR).

Claim 5 (Currently Amended): The process as claimed in claim 4, wherein said crosslinkable polymer is an SBS ~~high molecular weight~~ radial polymer having a weight average molecular weight of at least 150,000.

Claim 6 (Original): The process as claimed in claim 1, wherein said crosslink co-agent is a compound having a boiling point above 212 °F (100°C) and having a greater affinity to react with the crosslinkable polymer than with the asphalt composition.

Claim 7 (Original): The process as claimed in claim 6, wherein said crosslink co-agent is a member selected from the group consisting of dimaleimide compounds and cyanurate compounds.

Claim 8 (Original): The process as claimed in claim 7, wherein said crosslink co-agent is a member selected from the group consisting of phenylenedimaleimide, triallyl cyanurate and isocyanurate.

Claim 9 (Original): The process as claimed in claim 1, wherein said crosslink initiator is a member selected from the group consisting of organic peroxides, sulfur and sulfur donor compounds.

Claim 10 (Currently Amended): The process as claimed in claim 9, wherein said crosslink initiator is a member selected from the group consisting of di-(tert-butyl peroxyisopropyl)benzene, 1,5-diethyl-2,5-di-(tert-butyl-peroxy)-hexyne, tert-butyl cumyl peroxide, dicumyl peroxide, 1,5-dimethyl-2,5-di (tert-butyl-peroxy)-hexane, di-(2-tert-butylperoxypropyl-(2))-benzene, n-Butyl 4,4-di (tert-butylperoxy)-valerate, and 1-di (tert-

butylperoxy)-3,3,5- trimethylcyclohexane, elemental sulfur, 4,4'-dithiodimorpholine, thioacetamide, thiazole, sulfenamide, dithiocarbamates, xanthates, and thiurams.

Claim 11 (Original): The process as claimed in claim 9, wherein said crosslink initiator is a combination of both an organic peroxide and a member selected from sulfur and sulfur donors.

Claim 12 (Original): The process as claimed in claim 11, wherein said organic peroxide is added first, with said sulfur or sulfur donor being added after completion of said agitating step, followed by further agitation.

Claim 13 (Currently Amended): A crosslinked asphalt composition comprising:

- a) an asphalt composition; and
- b) a crosslinked polymer, comprising a polymer having one or more crosslinks that contain one or more residues from a crosslink co-agent, and further containing one or more residues from a crosslink initiator, and wherein said crosslinked-co-agent is a dimaleimide compound or triallyl cyanurate.

Claim 14 (Original): The composition as claimed in claim 13, wherein said polymer is a member selected from the group consisting of (co)polymers containing styrene units and/or butadiene units.

Claim 15 (Original): The composition as claimed in claim 14, wherein said polymer is a member selected from the group consisting of polymers containing polystyrene blocks and/or polybutadiene blocks.

Claim 16 (Original): The composition as claimed in claim 15, wherein said polymer is a member selected from the group consisting of SBR, SBS and BR.

Claim 17 (Currently Amended): The composition as claimed in claim 16, wherein said crosslinkable polymer is an SBS ~~high molecular weight~~ radial polymer having a weight average molecular weight of at least 150,000.

Claim 18 (Currently Amended): The composition as claimed in claim 13, wherein said crosslink co-agent is a dimaleimide compound ~~having a boiling point above 212 °F (100°C) and having a greater affinity to react with the polymer than with the asphalt composition.~~

Claim 19 (Currently Amended): The composition as claimed in claim 18, wherein said crosslink co-agent is a member selected from the group consisting of dimaleimide compounds and cyanurate compounds compound is phenylenedimaleimide.

Claim 20 (Currently Amended): The composition as claimed in claim 19 13, wherein said crosslink co-agent is a member selected from the group consisting of phenylenedimaleimide, triallyl cyanurate and isoeyanurate.

Claim 21 (Original): The composition as claimed in claim 13, wherein said crosslink initiator is a member selected from the group consisting of organic peroxides, sulfur and sulfur donor compounds.

Claim 22 (Currently Amended): The composition as claimed in claim 21, wherein said crosslink initiator is a member selected from the group consisting of di-(tert-butyl peroxyisopropyl)benzene, 1,5-diethyl-2,5-di-(tert-butyl-peroxy)-hexyne, tert-butyl cumyl peroxide, dicumyl peroxide, 1,5-dimethyl-2,5-di (tert-butyl-peroxy)-hexane, di-(2-tert-butylperoxypropyl-(2))-benzene, n-Butyl 4,4-di (tert-butylperoxy)-valerate, and 1-di (tert-butylperoxy)-3,3,5- trimethylcyclohexane, elemental sulfur, 4,4'-dithiodimorpholine, thioacetamide, thiazole, sulfenamide, dithiocarbamates, xanthates, and thiurams .

Claim 23 (Original): The composition as claimed in claim 21, wherein said crosslink initiator is a combination of both an organic peroxide and a member selected from sulfur and sulfur donors.

DISCUSSION OF THE AMENDMENT

Claim 1 has been amended by inserting a new second temperature range, as supported in the specification at page 4, lines 11-12, combined with the disclosure at page 6, line 5.

Claim 4 has been amended by inserting the appropriate names for the recited abbreviations and inserting parentheses around the abbreviations. The amendment is supported in the specification at page 1, lines 14 and 15, and page 7, line 9. Claims 5 and 17 have been amended as supported in the specification at page 7, line 11. Claims 10 and 22 have been amended by inserting an appropriate comma. Claim 13 has been amended by inserting part of Claims 19 and 20 therein. Claims 18-20 have been amended to be consistent with the amendment to Claim 13.

No new matter has been added by the above amendment. Claims 1-23 remain pending in the application.